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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 03/16/2010

Abelman Frayne & Schwab 666 Third Avenue, 10th Floor New York, NY 10017-5621 EXAMINER WEISZ, DAVID G

PAPER NUMBER

ART UNIT

DATE MAILED: 03/16/2010

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-------------------------|---------------------|------------------|
| 10/538,394 | 12/27/2005 | James Clyde Hassell JR. | 207,027 | 2272 |

TITLE OF INVENTION: MULTI-PHASE FLUID SAMPLING METHOD AND APPARATUS

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 06/16/2010 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

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If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

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| Abelman Frayr 666 Third Avenu New York, NY 1 | ne & Schwab ne, 10th Floor | /2010 | Lhe | Certify | ficate of Mailing or Trans | smission g deposited with the United st class mail in an envelope above, or being facsimile date indicated below. | |
| | | | | | | (Depositor's name) | |
| | | | | | | (Signature) | |
| | | | | | | (Date) | |
| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTOR | 1 | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
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| nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 06/16/2010 | |
| EXAM | INER | ART UNIT | CLASS-SUBCLASS |] | | | |
| WEISZ, D | | 1797 | 436-180000 | | | | |
| "Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A | ondence address (or Cha 1/122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT. | inge of Correspondence "Indication form and. Use of a Customer A TO BE PRINTED ON | 2. For printing on the p (I) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a 2 registered attorney or a 2 registered patern attor listed, no name will be THE PATENT (print or tyr data will appear on the p of a substitute for filing an. | 3 registered patent wely, e firm (having as a nagent) and the names rneys or agents. If no printed. | nember a 2 of up to name is 3 | document has been filed for | |
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| | SMALL ENTITY state | as. See 37 CFR 1.27. | | | ENTITY status. See 37 C | | |
| interest as shown by the r | ecords of the United Sta | ites Patent and Trademark | k Office. | ne applicant, a regist | ered attorney or agent; or t | he assignee or other party ir | |
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

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| Abelman Frayne & Schwab | | WEJSZ, DAVID G | | |
| 666 Third Avenue, 10th Floor | | | ART UNIT | PAPER NUMBER |
| New York, NY 10017-5621 | | 1797 | | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 618 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 618 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/538,394 HASSELL, JAMES CLYDE Notice of Allowability Examiner Art Unit DAVID WEISZ 1797 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to remarks filed 12/08/09. The allowed claim(s) is/are 1-18. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some* c) ☐ None of the: 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

| A+ | tachment(s) |
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| MI | aciiiileiius) |
| 4 | ☐ Notice of |

- 1. Notice of References Cited (PTO-892)
- Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date _____
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. Other .

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Art Unit: 1797

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or
additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR
1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the
payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ralph Crispino on 3/12/10.

The application has been amended as follows:

- Claim 1. (Currently Amended) A method for obtaining a homogeneous sample for
 eompositional analysis performing analysis on a homogeneous sample of a pressurized
 multi-phase fluid stream flowing in a pipeline, the fluid stream consisting of a majority
 component of hydrocarbon gas, the minor component consisting of a minor proportion of
 one or more hydrocarbon liquids and water in the form of vapor, aerosols, droplets and/or
 liquid streams, the method comprising:
 - a. injecting one or more surface active agents ("saa") into the fluid stream in an injection zone at a rate that is sufficient to form a stable uniform foam of the gas and the one or more hydrocarbon liquids and water components;
 - b. mixing the one or more saa with the fluid stream in a mixing zone to form a uniform foam composition flowing in the pipeline downstream of the mixing zone;
 - c. withdrawing a portion of the foam composition from the pipeline at a sampling point;
 - d. passing the portion of the foam composition withdrawn from the pipeline through a sampling loop that is in communication with the pipeline; and
 - e. removing a homogeneous sample of predetermined volume of the foam from the sampling loop for compositional analysis; and

f. performing multiphase analysis on the foam.

Claims 19-24 and 31-32 are canceled.

REASONS FOR ALLOWANCE

Claims 1-18 are allowed

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3. The following is an examiner's statement of reasons for allowance: Djabbarah et al. (US 5470749) has been determined to be the closest prior art of record. Djabbarah discloses an apparatus for measuring the quality of steam that is converted into foam after sampling (Col1/L36-67). However, as to independent claim 1, Djabbarah fails to disclose a method for performing analysis on a homogeneous sample, and additionally fails to disclose performing multiphase analysis on the foam.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID WEISZ whose telephone number is (571)270-7073. The examiner can normally be reached on Monday - Thursday, 7:30 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on (571)272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

3/12/2010

/Yelena G. Gakh/ Primary Examiner, Art Unit 1797

/D. W./ Examiner, Art Unit 1797